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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,911	07/24/2001	Takuma Miyazaki	450100-03358	4199
20999 7590 09/13/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER SHANG, ANNAN Q	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 09/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/911,911

Applicant(s)

MIYAZAKI ET AL.

Examiner

Annan Q. Shang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/17/07 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 16-19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Franco (2002/0046407)** in view of **Knudson et al (6,536,041)** and further in view of **Eyer et al (6,588,015)**.

As to claims 1-4, Franco discloses an "information processing apparatus which acquires preset-recording data for preset-recording a television program from a predetermined information providing apparatus via a network and, on the basis of said preset-recording data, controls preset-recording said television program" as recited in the preamble of claim 1 (illustrated in Figure 1). The claimed limitation of "selecting

means for selecting said television program to be preset-recorded" is met by Figure 4a item 406. "At a step 406, the web server 302 preferably receives programming instructions 118 from the user 110. In the embodiment illustrated in FIG. 2B, the user 110 submits the programming instructions 118 by choosing one or more programs to record through the Clickable Programming Page 210 or the Program Schedule Page 220. In one embodiment, the user 110 is first authenticated at the step 404 before programming instructions are received at the step 406. In alternative embodiments, the order of the steps 404 and 406 can be reversed, or the steps 404 and 406 can be performed simultaneously such as in conjunction with the use of identifying web browser cookies" (Paragraph 0085). The claimed limitation of "transmitting means for transmitting television program identifying information for identifying said television program selected by said selecting means to said information providing apparatus" is met by Figure 4a, item 408. "At a step 408, the control module 310 preferably creates programming data 108, based at least upon the programming instructions 118. In one embodiment, the control module encodes the programming instructions 118 for transmission over the communication link 130. In the case that a broadcast medium (e.g., broadcast television infrastructure) is used as the communication link 130, the programming instructions are preferably prefixed by a video recording system ID code. Alternatively, if a computer network is used as the communication link 130, the programming data 108 may be placed into addressed packets for transmission. The programming data 108 are also preferably encoded for the user's particular video recording system 120, possibly based upon brand, model, and/or configuration. In one

embodiment, all remotely programmable video recording systems 120 can be configured to receive programming data in a common format. The programming data 108 may also be encrypted to ensure privacy" (Paragraph 0086). Franco discloses receiving means for receiving said preset-recording data from said information providing apparatus in response to said television program identifying information as can be seen in Figure 4a (item 410). "At a step 410, the host communication module 312 preferably transmits the programming data 108 from a remote location to the video recording system 120 over the communication link 130. In one embodiment, one host system 102 is configured to service a large population, such as the continental United States or even the complete globe. The host system 102 is preferably operated from within one or more commercial buildings in the same general location. The majority or all of the video recording systems 120 are preferably located in users' homes. Therefore, the host system 102 will be remotely located with respect to most if not all video recording systems 120" (Paragraph 0087). The claimed limitations of "recording means for recording said television program to an information recording medium on the basis of said preset-recording data received by said receiving means" and "reproducing means for reproducing said television program recorded to said information recording medium by said recording means" are met by Figure 6. "FIG. 6 illustrates a process 600 that is preferably performed by the remotely programmable video recording device 500. At a step 602, the video recording device 500 receives programming data 108 from the remotely located host system 102 over a communication link 130. The receipt in the step 602 by the video recording device 500 corresponds to the transmission in the step

410 (FIG. 4) by the host system 102. At a step 604, the video recording device 500 records broadcast content in accordance with the programming data 108, which may be one or more VCR-Plus codes. At a step 606, the video recording device 500 replays the recorded content, preferably as a result of direct user commands. The direct user commands are preferably received from a hand held remote control operated by the user 110 in the presence of the video recording device 500" (Paragraph 0096). Franco discloses receiving advertisement associated data in response to said television program identifying information and display control means for controlling the displaying of the television program identifying information. The banners disclosed in Franco meet the limitation of advertisement associated data, where the banners are targeted to the user based on the users previous selections (See Paragraphs 0131-0133).

Franco, discloses ad banners, but silent to disclose displaying the advertisement-associated data as a function of the keyword data and the television program substantially at same time for a viewer to view the advertisements associated data while simultaneously viewing the television program.

However, **Knudson** teaches displaying the advertisement-associated data as a function of the keyword data and the television program substantially at same time for a viewer to view the advertisements associated data while simultaneously viewing the television program so as to maximize the viewer's exposure to an advertisement (fig.18-19, 24-27, col.13, line 55-col.14, line 37, line 48-col.15, line 31 and col.16, line 55-col.17, line 1+).

Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with displaying the advertisement-associated data as a function of the keyword data and the television program substantially at same time for a viewer to view the advertisements associated data while simultaneously viewing the television program for the stated advantage and further provide keyword data to enable the viewer to interact to retrieve additional information.

Franco as modified by Knudson fail to explicitly teach controlling the display of ad-associated data to force the display of ad-associated data and forced the viewer to view the ad-associated data.

However, note the Eyer reference figures 1-2, 10 and 11, discloses an interactive broadcast system tagged with various interactive features, for skip forward and skip backward, where the data is transmitted in real-time, buffer at the receiver to enable the user to play as desired and further teaches tiers of service levels so that a paying subscriber can bypass some or all of the commercial messages, while non-paying users may not bypass the commercials, where a control data at the receiver identifies the tags to implement these functions, such as skipping commercial, allow to stop display commercial "broadcast stoppage," force to watch commercial "non-activity in the broadcast event," etc., and where the tag(s) are enabled/disabled based on payments (col.3, line 64-col.4, line 34, col.6, lines 1-17, lines 30-61, col.15, line 58-col.17, line 1+).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Eyer into the system of Franco as modified by Knudson to enable the service provider to provide a plurality of service tiers

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(based on payments) that enables some users to skip through some ads and to forced presentation of ads to other users, thereby enabling the user/provider to flexibly control the display of broadcast data or ads as desired.

As to claims 16, and 21-22, Franco discloses an "information processing apparatus which acquires preset-recording data for preset-recording a television program from a predetermined information providing apparatus via a network and, on the basis of said preset-recording data, controls preset-recording said television program" as recited in the preamble of claim 1 (illustrated in Figure 1). The claimed limitation of "selecting means for selecting said television program to be preset-recorded" is met by Figure 4a item 406. "At a step 406, the web server 302 preferably receives programming instructions 118 from the user 110. In the embodiment illustrated in FIG. 2B, the user 110 submits the programming instructions 118 by choosing one or more programs to record through the Clickable Programming Page 210 or the Program Schedule Page 220. In one embodiment, the user 110 is first authenticated at the step 404 before programming instructions are received at the step 406. In alternative embodiments, the order of the steps 404 and 406 can be reversed, or the steps 404 and 406 can be performed simultaneously such as in conjunction with the use of identifying web browser cookies" (Paragraph 0085). The claimed limitation of "transmitting means for transmitting television program identifying information for identifying said television program selected by said selecting means to said information providing apparatus" is met by Figure 4a, item 408. "At a step 408, the control module 310 preferably creates programming data 108, based at least upon the programming instructions 118. In one

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embodiment, the control module encodes the programming instructions 118 for transmission over the communication link 130. In the case that a broadcast medium (e.g., broadcast television infrastructure) is used as the communication link 130, the programming instructions are preferably prefixed by a video recording system ID code. Alternatively, if a computer network is used as the communication link 130, the programming data 108 may be placed into addressed packets for transmission. The programming data 108 are also preferably encoded for the user's particular video recording system 120, possibly based upon brand, model, and/or configuration. In one embodiment, all remotely programmable video recording systems 120 can be configured to receive programming data in a common format. The programming data 108 may also be encrypted to ensure privacy" (Paragraph 0086). Franco discloses receiving means for receiving said preset-recording data from said information providing apparatus in response to said television program identifying information as can be seen in Figure 4a (item 410). "At a step 410, the host communication module 312 preferably transmits the programming data 108 from a remote location to the video recording system 120 over the communication link 130. In one embodiment, one host system 102 is configured to service a large population, such as the continental United States or even the complete globe. The host system 102 is preferably operated from within one or more commercial buildings in the same general location. The majority or all of the video recording systems 120 are preferably located in users' homes. Therefore, the host system 102 will be remotely located with respect to most if not all video recording systems 120" (Paragraph 0087). The claimed limitations of "recording means for

recording said television program to an information recording medium on the basis of said preset-recording data received by said receiving means" and "reproducing means for reproducing said television program recorded to said information recording medium by said recording means" are met by Figure 6. "FIG. 6 illustrates a process 600 that is preferably performed by the remotely programmable video recording device 500. At a step 602, the video recording device 500 receives programming data 108 from the remotely located host system 102 over a communication link 130. The receipt in the step 602 by the video recording device 500 corresponds to the transmission in the step 410 (FIG. 4) by the host system 102. At a step 604, the video recording device 500 records broadcast content in accordance with the programming data 108, which may be one or more VCR-Plus codes. At a step 606, the video recording device 500 replays the recorded content, preferably as a result of direct user commands. The direct user commands are preferably received from a hand held remote control operated by the user 110 in the presence of the video recording device 500" (Paragraph 0096). Franco discloses receiving advertisement associated data in response to said television program identifying information and display control means for controlling the displaying of the television program identifying information. The banners disclosed in Franco meet the limitation of advertisement associated data, where the banners are targeted to the user based on the users previous selections (See Paragraphs 0131-0133).

Franco, discloses ad banners, but silent to disclose displaying the advertisement-associated data as a function of the keyword data for the viewer to view the advertisement-associated data.

However, **Knudson** teaches displaying the advertisement-associated data as a function of the keyword data and the television program substantially at same time for a viewer to view the advertisements associated data while simultaneously viewing the television program so as to maximize the viewer's exposure to an advertisement (fig.18-19, 24-27, col.13, line 55-col.14, line 37, line 48-col.15, line 31 and col.16, line 55-col.17, line 1+).

Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with displaying the advertisement-associated data as a function of the keyword data to enable the viewer to interact to retrieve additional information.

Franco as modified by Knudson fail to explicitly teach controlling the display of ad-associated data to force the display of ad-associated data and forced the viewer to view the ad-associated data.

However, note the Eyer reference figures 1-2, 10 and 11, teaches tiers of service levels so that a paying subscriber can bypass some or all of the commercial messages, while non-paying users may not bypass the commercials, where a control data at the receiver identifies the tags to implement these functions, such as skipping commercial, allow to stop display commercial "broadcast stoppage," force to watch commercial "non-activity in the broadcast event," etc., and where the tag(s) are enabled/disabled based on payments (col.3, line 64-col.4, line 34, col.6, lines 1-17, lines 30-61, col.15, line 58-col.17, line 1+).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Eyer into the system of Franco as modified by Knudson to enable the service provider to provide a plurality of service tiers (based on payments) that enables some users to skip through some ads and to forced presentation of ads to other users, thereby enabling the user/provider to flexibly control the display of broadcast data or ads as desired.

In regard to claim 17, Franco discloses advertisement data corresponding to a television program from a first site as is disclosed in Paragraphs 0131-0133.

As to claims 18-19, Franco discloses advertisement data corresponding to a television program from a first site as is disclosed in Paragraphs 0131-0133. The aforementioned combined teaching fails to disclose acquiring a keyword preset to a television program from a second site. Official notice is taken that it is well known in the art to acquire program information (such as keywords defining the type of program) so as to reduce the traffic on any one site. Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with acquiring program information (such as keywords defining the type of program) for the stated advantage.

3. Claims 5-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Franco (2002/0046407)** in view of **Knudson et al (6,536,041)** and further in view of **Ozer et al (6,704,929)** and further in view of **Eyer et al (6,588,015)**.

As to claims 5, 8, 10 and 13, Franco discloses an "information processing apparatus which acquires preset-recording data for preset-recording a television

program from a predetermined information providing apparatus via a network and, on the basis of said preset-recording data, controls preset-recording said television program" as recited in the preamble of claim 1 (illustrated in Figure 1). The claimed limitation of "selecting means for selecting said television program to be preset-recorded" is met by Figure 4a item 406. "At a step 406, the web server 302 preferably receives programming instructions 118 from the user 110. In the embodiment illustrated in FIG. 2B, the user 110 submits the programming instructions 118 by choosing one or more programs to record through the Clickable Programming Page 210 or the Program Schedule Page 220. In one embodiment, the user 110 is first authenticated at the step 404 before programming instructions are received at the step 406. In alternative embodiments, the order of the steps 404 and 406 can be reversed, or the steps 404 and 406 can be performed simultaneously such as in conjunction with the use of identifying web browser cookies" (Paragraph 0085). The claimed limitation of "transmitting means for transmitting television program identifying information for identifying said television program selected by said selecting means to said information providing apparatus" is met by Figure 4a, item 408. "At a step 408, the control module 310 preferably creates programming data 108, based at least upon the programming instructions 118. In one embodiment, the control module encodes the programming instructions 118 for transmission over the communication link 130. In the case that a broadcast medium (e.g., broadcast television infrastructure) is used as the communication link 130, the programming instructions are preferably prefixed by a video recording system ID code. Alternatively, if a computer network is used as the communication link 130, the

programming data 108 may be placed into addressed packets for transmission. The programming data 108 are also preferably encoded for the user's particular video recording system 120, possibly based upon brand, model, and/or configuration. In one embodiment, all remotely programmable video recording systems 120 can be configured to receive programming data in a common format. The programming data 108 may also be encrypted to ensure privacy" (Paragraph 0086). Franco discloses receiving means for receiving said preset-recording data from said information providing apparatus in response to said television program identifying information as can be seen in Figure 4a (item 410). "At a step 410, the host communication module 312 preferably transmits the programming data 108 from a remote location to the video recording system 120 over the communication link 130. In one embodiment, one host system 102 is configured to service a large population, such as the continental United States or even the complete globe. The host system 102 is preferably operated from within one or more commercial buildings in the same general location. The majority or all of the video recording systems 120 are preferably located in users' homes. Therefore, the host system 102 will be remotely located with respect to most if not all video recording systems 120" (Paragraph 0087). The claimed limitations of "recording means for recording said television program to an information recording medium on the basis of said preset-recording data received by said receiving means" and "reproducing means for reproducing said television program recorded to said information recording medium by said recording means" are met by Figure 6. "FIG. 6 illustrates a process 600 that is preferably performed by the remotely programmable video recording device 500. At a

step 602, the video recording device 500 receives programming data 108 from the remotely located host system 102 over a communication link 130. The receipt in the step 602 by the video recording device 500 corresponds to the transmission in the step 410 (FIG. 4) by the host system 102. At a step 604, the video recording device 500 records broadcast content in accordance with the programming data 108, which may be one or more VCR-Plus codes. At a step 606, the video recording device 500 replays the recorded content, preferably as a result of direct user commands. The direct user commands are preferably received from a hand held remote control operated by the user 110 in the presence of the video recording device 500" (Paragraph 0096). Franco discloses receiving advertisement associated data in response to said television program identifying information and display control means for controlling the displaying of the television program identifying information. The banners disclosed in Franco meet the limitation of advertisement associated data, where the banners are targeted to the user based on the users previous selections (See Paragraphs 0131-0133).

Franco discloses ad banners, but silent to disclose displaying the advertisement-associated data as a function of the keyword data for the viewer to view the advertisement-associated data.

However, **Knudson** teaches displaying the advertisement-associated data as a function of the keyword data and the television program substantially at same time for a viewer to view the advertisements associated data while simultaneously viewing the television program so as to maximize the viewer's exposure to an advertisement

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(fig.18-19, 24-27, col.13, line 55-col.14, line 37, line 48-col.15, line 31 and col.16, line 55-col.17, line 1+).

Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with displaying the advertisement-associated data as a function of the keyword data to enable the viewer to interact to retrieve additional information.

The combined teaching fails to disclose notification means for notifying, if a predetermined condition is satisfied after the displaying of said advertisement-associated data is started by said display control means, said information providing apparatus.

Ozer teaches notification means for notifying; if a predetermined condition is satisfied after the displaying of said advertisement-associated data is started by said display control means, said information providing apparatus so as to gather information for business considerations. "Once the event occurs, management device 120 couples the occurrence of the event with information specific to the programming displayed as a result of the event. One embodiment allows for the use of unique IDs from the electronic program guide to be coupled to the event, and the date and time when the event occurred. The IDs identify such information as the program viewed and the channel tuned. Thus, a processor included in management device 120 (or any other electronic device in which the invention is implemented), coupled with computer-executable instructions, represents one example of means for generating viewing information" (Col 7, Lines 41-52).

Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching with notification means for the stated advantage.

Franco as modified by Knudson and Ozer fail to explicitly teach controlling the display of ad-associated data to force the display of ad-associated data and forced the viewer to view the ad-associated data.

However, note the Eyer reference figures 1-2, 10 and 11, teaches tiers of service levels so that a paying subscriber can bypass some or all of the commercial messages, while non-paying users may not bypass the commercials, where a control data at the receiver identifies the tags to implement these functions, such as skipping commercial, allow to stop display commercial "broadcast stoppage," force to watch commercial "non-activity in the broadcast event," etc., and where the tag(s) are enabled/disabled based on payments (col.3, line 64-col.4, line 34, col.6, lines 1-17, lines 30-61, col.15, line 58-col.17, line 1+).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Eyer into the system of Franco as modified by Knudson and Ozer to enable the service provider to provide a plurality of service tiers (based on payments) that enables some users to skip through some ads and to forced presentation of ads to other users, thereby enabling the user/provider to flexibly control the display of broadcast data or ads as desired.

As to claims 6-7, 11-12 and 14-15, the aforementioned combined teaching fails to disclose that the predefined condition is a correlation between a television program or television program keyword and an advertisement.

However, Official notice is taken that it is notoriously well known in the art to monitor the correlation between a television program (where keywords can be used to define a program type) and an advertisement so as to increase the effectiveness of the advertisements.

Consequently, it would have been obvious to one of ordinary skill in the art to modify the aforementioned combined teaching with to monitor the correlation between a television program (where keywords can be used to define a program type) and an advertisement for the stated advantage.

Claim 8 is met as previously discussed with respect to claim 5.

As to claim 9, Franco discloses that the advertisement is operable to be displayed during the reproduction of the program ([0027]).

Response to Arguments

4. Applicant's arguments with respect to claims 1-19, 21 and 22 have been considered but are moot in view of the new ground(s) of rejection. The amendment to all the independent claims necessitated the new ground(s) of rejection discussed above.

This office action is non-final.

Conclusion

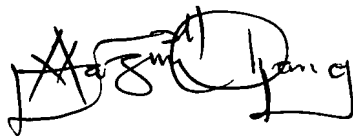
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zigmond et al (6,698,020) disclose techniques for intelligent video ad insertion.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at **866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, call **800-786-9199 (IN USA OR CANADA)** or **571-272-1000**.

A handwritten signature in black ink, appearing to read 'Annan Q. Shang', with a stylized, looped flourish at the end.

Annan Q. Shang